

In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-16 (cancelled)

17. (New) A temperature probe comprising:

a probe body;

a hollow tip member secured to the probe body, wherein the hollow tip member comprises:

an outer wall as a thermal contact surface,

an inner wall inside the outer wall,

a thermal isolation space formed between the outer wall and the inner wall, and

a hollow cavity surrounded by the inner wall;

a thermal sensor disposed within the hollow tip member for sensing the temperature of the thermal contact surface and producing a temperature signal; and

a set of transmission wires connected to the thermal sensor for passing the temperature signal;

wherein the inner wall comprises a hole near the rear end of the hollow tip member for allowing the transmission wires to be passed into the hollow cavity.

18. (New) The temperature probe as recited in claim 17 wherein the outer wall or inner wall of the hollow tip member is made of thermal conductivity metal.

19. (New) The temperature probe as recited in claim 17 wherein the inner wall of the hollow tip member is made of thermal insulating material.

20. (New) The temperature probe as recited in claim 17 wherein the transmission wires are bonded to the inside of the outer wall in a spiral form.

21. (New) The temperature probe as recited in claim 17 wherein the transmission wires are mounted within the thermal isolation space near the hole of the inner wall.